## H.R. 1277, AS REPORTED BY THE SUBCOMMITTEE ON ENERGY AND POWER on May 22, 1997

Strike all after the enacting clause and insert in lieu thereof the following:

1	SECTION 1. SHORT TITLE.
2	This Act may be cited as the "Department of Energy
3	Civilian Research and Development Act of 1997".
4	SEC. 2. DEFINITIONS.
5	For purposes of this Act—
6	(1) the term "CERN" means the European Or-
7	ganization for Nuclear Research;
8	(2) the term "Department" means the Depart-
9	ment of Energy;
10	(3) the term "Large Hadron Collider project"
11	means the Large Hadron Collider project at CERN;
12	and
13	(4) the term "Secretary" means the Secretary
14	of Energy.
15	SEC. 3. AUTHORIZATION OF APPROPRIATIONS.
16	(a) Energy Supply Research and Development
17	ACTIVITIES.—There are authorized to be appropriated to
18	the Secretary for Energy Supply Research and Develop-
19	ment operating expenses and capital equipment

1	\$1,942,429,000 for fiscal year 1998 and \$1,965,401,000
2	for fiscal year 1999, of which—
3	(1) \$272,820,000 for fiscal year 1998 (reduced
4	by \$15,000,000 to reflect the use of prior year bal-
5	ances) and \$270,342,000 for fiscal year 1999 shall
6	be for Solar and Renewable Resources Technologies,
7	including—
8	(A) $$2,150,000$ for fiscal year 1998 and
9	\$2,150,000 for fiscal year 1999 for Solar Build-
10	ing Technology Research;
1	(B) \$63,900,000 for fiscal year 1998 and
12	\$64,900,000 for fiscal year 1999 for Photo-
13	voltaic Energy Systems;
14	(C) \$18,170,000 for fiscal year 1998 and
15	\$13,620,000 for fiscal year $1999$ for Solar
6	Thermal Energy Systems;
7	(D) \$28,835,000 for fiscal year 1998 and
8	\$28,190,000 for fiscal year 1999 for Biopower/
9	Biofuels Energy Systems;
20	(E) \$29,500,000 for fiscal year 1998 and
21	\$18,140,000 for fiscal year 1999 for Wind En-
22	ergy Systems;
23	(F) $$2,800,000$ for fiscal year 1998 and
24	\$500,000 for fiscal year 1999 for the National
25	Renewable Energy Laboratory;

I	(G) \$19.518,000 for fiscal year 1998 and
2	\$19,518,000 for fiscal year 1999 for Geo-
3	thermal Electric Research and Development
4	and Deployment;
5	(H) \$1,000,000 for fiscal year 1998 for
6	Hydropower;
7	(I) \$44,500,000 for fiscal year 1998 and
8	\$36,500,000 for fiscal year 1999 for Electric
9	Energy Systems and Storage, of which—
10	(i) \$8,000,000 for fiscal year 1998
11	shall be for Electric and Magnetic Fields
12	Research and Development;
13	(ii) \$32,500,000 for fiscal year 1998
14	and $$32,500,000$ for fiscal year 1999 shall
15	be for High-Temperature Superconductiv-
16	ity Research and Development; and
17	(iii) \$4,000,000 for fiscal year 1998
18	and \$4,000,000 for fiscal year 1999 shall
19	be for Energy Storage Systems;
20	(J) \$50,000,000 for fiscal year 1998 and
21	\$75,000,000 for fiscal year 1999 shall be for a
22	Solar and Renewable Energy Science Initiative,
23	to be managed by the Director of the Office of
24	Energy Research, in consultation with the As-
25	sistant Secretary for Energy Efficiency and Re-

1	newable Energy on the goals and priorities of
2	the initiative, for grants to be competitively
3	awarded and subject to peer review for research
4	related to solar and renewable energy; and
5	(K) \$12,447,000 for fiscal year 1998 and
6	\$11,824,000 for fiscal year 1999 for Program
7	Direction;
8	(2) \$152,312,000 for fiscal year 1998 and
9	\$134,733,000 for fiscal year 1999 shall be for Nu-
10	clear Energy, including—
11	(A) \$47,000,000 for fiscal year 1998 and
12	\$43,350,000 for fiscal year 1999 for Advanced
13	Radioisotope Power Systems;
14	(B) \$9,500,000 for fiscal year 1998 and
15	\$8,809,000 for fiscal year 1999 for Oak Ridge
16	Landlord;
17	(C) \$3,217,000 for fiscal year 1998 and
18	\$3,217,000 for fiscal year 1999 for Test Reac-
19	tor Area Landlord;
20	(D) \$2,000,000 for fiscal year 1998 for
21	Advanced Test Reactor Fusion Irradiations;
22	(E) \$6,000,000 for fiscal year 1998 and
23	\$6,000,000 for fiscal year 1999 for University
24	Nuclear Science and Reactor Support;

1	(F) $$70,535,000$ for fiscal year 1998 and
2	\$60,000,000 for fiscal year 1999 for Termi-
3	nation Costs; and
4	(G) \$14,060,000 for fiscal year 1998 and
5	\$13,357,000 for fiscal year 1999 for Program
6	Direction;
7	(3) \$367,538,000 for fiscal year 1998 and
8	\$378,564,000 for fiscal year 1999 shall be for Bio-
9	logical and Environmental Research, including—
10	(A) \$157,037,000 for fiscal year 1998 and
11	\$161,748,000 for fiscal year 1999 for Life
12	Sciences;
13	(B) \$100,954,000 for fiscal year 1998 and
14	\$103,983,000 for fiscal year 1999 for Environ-
15	mental Processes;
16	(C) \$66,435,000 for fiscal year 1998 and
17	\$68,428,000 for fiscal year 1999 for Environ-
18	mental Remediation;
19	(D) \$43,112,000 for fiscal year 1998 and
20	\$44,405,000 for fiscal year 1999 for Medical
21	Applications and Measurement Sciences; and
22	(E) \$1,000,000 for fiscal year 1998 and
23	\$1,000,000 for fiscal year 1999 for the United
24	States-Mexico Foundation for Science for re-
25	search on biosciences and the environment,

1	except that, notwithstanding subparagraphs (A)
2	through (E), the total amount which may be appro-
3	priated under this paragraph shall not exceed the
4	overall sums stated at the beginning of this para-
5	$\operatorname{graph};$
6	(4) \$240,000,000 for fiscal year 1998 and
7	\$240,000,000 for fiscal year 1999 shall be for Fu-
8	sion Energy Sciences, of which \$5,000,000 for fiscal
9	year $1998$ and $$5,000,000$ for fiscal year $1999$ shall
10	be for General Plasma Science;
11	(5) \$659,812,000 for fiscal year 1998 and
12	\$678,888,000 for fiscal year 1999 shall be for Basic
13	Energy Sciences, including—
14	(A) \$391,047,000 for fiscal year 1998 and
15	\$402,060,000 for fiscal year 1999 for Materials
16	Sciences, of which not to exceed \$5,000,000 for
17	each such fiscal year may be used for the High
18	Flux Beam Reactor at Brookhaven National
19	Laboratory;
20	(B) \$199,933,000 for fiscal year 1998 and
21	\$205,931,000 for fiscal year 1999 for Chemical
22	Sciences;
23	(C) \$41,371,000 for fiscal year 1998 and
24	\$42,612,000 for fiscal year 1999 for Engineer-
25	ing and Geosciences; and

l	(D) $$27,461,000$ for fiscal year 1998 and
2	\$28,285,000 for fiscal year 1999 for Energy
3	Biosciences;
4	(6) \$140,907,000 for fiscal year 1998 and
5	\$145,134,000 for fiscal year 1999 shall be for Com-
6	putational and Technology Research, including—
7	(A) \$117,490,000 for fiscal year 1998 and
8	\$121,014,000 for fiscal year 1999 for Mathe-
9	matical, Information, and Computational
10	Sciences;
11	(B) \$15,829,000 for fiscal year 1998 and
12	\$16,304,000 for fiscal year 1999 for Labora-
13	tory Technology Research; and
14	(C) \$7,588,000 for fiscal year 1998 and
15	\$7,816,000 for fiscal year 1999 for Advanced
16	Energy Projects;
17	(7) \$1,500,000 for fiscal year 1998 and
18	\$1,500,000 for fiscal year 1999 shall be for Energy
19	Research Analysis;
20	(8) \$29,070,000 for fiscal year 1998 and
21	\$27,434,000 for fiscal year 1999 shall be for Energy
22	Research-Energy Supply Program Direction; and
23	(9) \$93,480,000 for fiscal year 1998 and
24	\$88,806,000 for fiscal year 1999 shall be for Field
25	Operations.

1	(b) Energy Assets Acquisition.—There are au
2	thorized to be appropriated to the Secretary for the pur
3	chase, construction, expansion, and acquisition of rea
4	plant, property, and other physical assets for energy sup-
5	ply research and development activities, \$34,885,000 for
6	fiscal year 1998 and \$29,432,000 for fiscal year 1999, or
7	which—
8	(1) for Solar and Renewable Resources Tech-
9	nology, \$2,200,000 for fiscal year 1998 shall be for
10	completion of Project 96-E-100, Field Test Labora-
11	tory Building Renovation and Expansion, National
12	Renewable Energy Laboratory;
13	(2) for Nuclear Energy, \$4,425,000 for fiscal
14	year $1998$ and $\$6,425,000$ for fiscal year $1999$ shall
15	be for completion of Project 95-E-201, Test Reac-
16	tor Area Fire and Life Safety Improvements, Idaho
17	National Engineering and Environmental Labora-
18	tory;
19	(3) for Basic Energy Sciences, \$7,000,000 for
20	fiscal year $1998$ and $\$4,000,000$ for fiscal year $1999$
21	for completion of Project 96-E-300, Combustion
22	Research Facility, Phase II, Sandia National Lab-
23	oratories, Livermore, California; and

l	(4) for Multiprogram Energy Laboratories-Fa-
2	cilities Support, \$21,260,000 for fiscal year 1998
3	and \$19,007,000 for fiscal year 1999 for—
4	(A) Project MEL-001, Multiprogram En-
5	ergy Laboratories Infrastructure Project, Var-
6	ious Locations, \$7,259,000 for fiscal year 1998
7	and \$12,161,000 for fiscal year 1999;
8	(B) Project 96-E-333, Multiprogram En-
9	ergy Laboratories Upgrades, Various Locations,
10	\$5,273,000 for fiscal year 1998 and \$268,000
11	for fiscal year 1999;
12	(C) Project 95–E–308, Sanitary System
13	Modifications, Phase II, Brookhaven National
14	Laboratory, Upton, New York, \$568,000 for
15	fiscal year 1998;
16	(D) Project 95–E–307, Fire Safety Im-
17	provements-Phase III, Argonne National Lab-
18	oratory, Argonne, Illinois, \$718,000 for fiscal
19	year 1998;
20	(E) Project 95-E-301, Central Heating
21	Plant Rehabilitation-Phase I, Argonne National
22	Laboratory, Argonne, Illinois, \$3,442,000 for
23	fiscal year 1998; and
24	(F) Project 94-E-363, Roofing Improve-
25	ments, Oak Ridge National Laboratory, Oak

1	Ridge, Tennessee, \$4,000,000 for fiscal year
2	1998 and \$6,578,000 for fiscal year 1999.
3	(c) GENERAL SCIENCE AND RESEARCH ACTIVI-
4	TIES.—There are authorized to be appropriated to the
5	Secretary for General Science and Research Activities op-
6	erating expenses and capital equipment—
7	(1) \$865,210,000 for fiscal year 1998 (reduced
8	by \$15,000,000 to reflect the use of prior year bal-
9	ances), including—
10	(A) \$599,185,000 for High Energy Phys-
11	ies;
12	(B) \$256,525,000 for Nuclear Physics;
13	and
14	(C) \$9,500,000 for Program Direction;
15	and
16	(2) \$941,000,000 for fiscal year 1999, includ-
17	ing—
18	(A) \$607,645,000 for High Energy Phys-
19	ics;
20	(B) \$324,330,000 for Nuclear Physics;
21	and
22	(C) \$9,025,000 for Program Direction.
23	None of the funds authorized for High Energy Physics
24	by this subsection or subsection (d) may be used for the
25	Large Hadron Collider project, unless the Secretary, in

I	consultation with the Director of the National Science
2	Foundation, has transmitted to the Committee on Science
3	of the House of Representatives and the Committee on
4	Energy and Natural Resources of the Senate a report on
5	the impacts of such funding on the operations and viability
6	of United States high energy and nuclear physics facilities.
7	(d) SCIENCE ASSETS ACQUISITION.—There are au-
8	thorized to be appropriated to the Secretary for the pur-
9	chase, construction, expansion, and acquisition of real
10	plant, property, and other physical assets for general
11	science and research activities, \$126,870,000 for fiscal
12	year 1998, of which—
13	(1) \$50,850,000 shall be for High Energy
14	Physics, including—
15	(A) \$30,950,000 for completion of Project
16	92-G-302, Fermilab Main Injector, Fermi Na-
17	tional Accelerator Laboratory, Illinois;
18	(B) \$9,400,000 for completion of Project
19	97-G-303, Stanford Linear Accelerator Center
20	Master Station Upgrade, California;
21	(C) \$5,500,000 for architectural engineer-
22	ing and technical design work for Project 98-
23	G-304, Neutrinos at the Main Injector, Fermi
24	National Accelerator Laboratory, Illinois: and

1	(D) \$5,000,000 for completion of Project
2	98-G-305, Fermilab C-Zero Area Experimental
3	Hall, Fermi National Accelerator Laboratory,
4	Illinois; and
5	(2) \$76,020,000 shall be for Nuclear Physics,
6	for completion of Project 91-G-300, Relativistic
7	Heavy Ion Collider, Brookhaven National Labora-
8	tory, Upton, New York.
9	(e) Fossil Energy Research and Develop-
10	MENT.—There are authorized to be appropriated to the
11	Secretary for Fossil Energy Research and Development
12	operating expenses, capital equipment, and construction,
13	\$335,919,000 for fiscal year 1998 and \$335,250,000 for
14	fiscal year 1999, of which—
15	(1) \$105,831,000 for fiscal year 1998 and
16	\$104,206,000 for fiscal year 1999 shall be for Coal
17	operating expenses, including—
18	(A) \$5,064,000 for fiscal year 1998 and
19	\$5,064,000 for fiscal year 1999 for Coal Prepa-
20	ration;
21	(B) \$5,816,000 for fiscal year 1998 and
22	\$5,816,000 for fiscal year 1999 for Direct Liq-
23	uefaction;

1	(C) \$4,223,000 for fiscal year 1998 and
2	\$4,223,000 for fiscal year 1999 for Indirect
3	Liquefaction;
4	(D) \$741,000 for fiscal year 1998 and
5	\$741,000 for fiscal year 1999 for Advanced
6	Clean Fuels Research Advanced Research and
7	Environmental Technology;
8	(E) \$5,462,000 for fiscal year 1998 and
9	\$5,462,000 for fiscal year 1999 for Advanced
10	Pulverized Coal-Fired Powerplant;
11	(F) \$10,927,000 for fiscal year 1998 and
12	\$10,927,000 for fiscal year 1999 for Indirect
13	Fired Cycle;
14	(G) \$22,342,000 for fiscal year 1998 and
15	\$20,717,000 for fiscal year 1999 for High-Effi-
16	ciency-Integrated Gasification Combined Cycle;
17	(H) \$17,875,000 for fiscal year 1998 and
18	\$17,875,000 for fiscal year 1999 for High-Effi-
19	ciency Pressurized Fluidized Bed;
20	(I) \$9,734,000 for fiscal year 1998 and
21	\$9,734,000 for fiscal year 1999 for Advanced
22	Clean/Efficient Power Systems Advanced Re-
23	search and Environmental Technology; and

I	(J) $$23,647,000$ for fiscal year 1998 and
2	\$23,647,000 for fiscal year 1999 for Advanced
3	Research and Technology Development;
4	(2) \$47,419,000 for fiscal year 1998 and
5	\$46,464,000 for fiscal year 1999 shall be for Oil
6	Technology operating expenses, including—
7	(A) \$31,157,000 for fiscal year 1998 and
8	\$31,157,000 for fiscal year 1999 for Explo-
9	ration and Production Supporting Research;
10	(B) \$3,931,000 for fiscal year 1998 and
11	\$3,931,000 for fiscal year 1999 for Recovery
12	Field Demonstrations;
13	(C) \$6,411,000 for fiscal year 1998 and
14	\$5,456,000 for fiscal year 1999 for Exploration
15	and Production Environmental Research; and
16	(D) \$5,920,000 for fiscal year 1998 and
17	\$5,920,000 for fiscal year 1999 for Processing
18	Research and Downstream Operations;
19	(3) \$85,877,000 for fiscal year 1998 and
20	\$85,877,000 for fiscal year 1999 shall be for Gas
21	operating expenses, including—
22	(A) \$14,123,000 for fiscal year 1998 and
23	\$14,123,000 for fiscal year 1999 for Natural
24	Gas Research Exploration and Production:

1	(B) \$993,000 for fiscal year 1998 and
2	\$993,000 for fiscal year 1999 for Natural Gas
3	Research Delivery and Storage;
4	(C) \$31,379,000 for fiscal year 1998 and
5	\$31,379,000 for fiscal year 1999 for Natural
6	Gas Research Advanced Turbine Systems;
7	(D) \$4,808,000 for fiscal year 1998 and
8	\$4,808,000 for fiscal year 1999 for Natural
9	Gas Research Utilization;
10	(E) \$4,617,000 for fiscal year 1998 and
11	\$4,617,000 for fiscal year 1999 for Natural
12	Gas Research Environmental Research/Regu-
13	latory Analysis;
14	(F) \$1,210,000 for fiscal year 1998 and
15	\$1,210,000 for fiscal year 1999 for Fuel Cells
16	Advanced Research;
17	(G) \$16,335,000 for fiscal year 1998 and
18	\$16,335,000 for fiscal year 1999 for Fuel Cells
19	Molten Carbonate Systems to continue cost-
20	shared cost reduction and performance improve-
21	ment of one system; and
22	(H) \$12,412,000 for fiscal year 1998 and
23	\$12,412,000 for fiscal year 1999 for Fuel Cells
24	Advanced Concepts:

l	(4) \$61,783,000 for fiscal year 1998 and
2	\$62,494,000 for fiscal year 1999 shall be for Pro-
3	gram Direction and Management Support operating
4	expenses, including—
5	(A) $$13,676,000$ for fiscal year 1998 and
6	\$12,992,000 for fiscal year 1999 for Head-
7	quarters Program Direction; and
8	(B) \$48,107,000 for fiscal year 1998 and
9	\$49,502,000 for fiscal year 1999 for Energy
10	Technology Center Program Direction;
11	(5) \$2,000,000 for fiscal year 1998 and
12	\$2,000,000 for fiscal year 1999 shall be for Plant
13	and Capital Equipment, for construction of General
14	Plant Projects;
15	(6) \$5,836,000 for fiscal year 1998 and
16	\$5,836,000 for fiscal year 1999 shall be for Cooper-
17	ative Research and Development operating expenses;
18	(7) \$2,173,000 for fiscal year 1998 and
19	\$2,173,000 for fiscal year 1999 shall be for Fuels
20	Conversion, Natural Gas, and Electricity operating
21	expenses; and
22	(8) \$25,000,000 for fiscal year 1998 and
23	\$30,000,000 for fiscal year 1999 shall be for a Fos-
24	sil Energy Science Initiative to be managed by the
25	Director of the Office of Energy Research, in con-

l	sultation with the Assistant Secretary for Fossil En-
2	ergy on the goals and priorities of the initiative, for
3	grants to be competitively awarded and subject to
4	peer review for research relating to fossil energy.
5	Notwithstanding paragraphs (1) through (8), the total
6	amount which may be appropriated under this subsection
7	shall not exceed the overall sums stated at the beginning
8	of this subsection;
9	(f) Energy Conservation Research and Devel-
10	OPMENT.—There are authorized to be appropriated to the
11	Secretary for Energy Conservation Research and Develop-
12	ment operating expenses and capital equipment,
13	\$414,208,000 for fiscal year 1998 (reduced by
14	\$20,000,000 to reflect the use of prior year balances) and
15	\$436,703,000 for fiscal year 1999, of which—
16	(1) \$41,004,000 for fiscal year 1998 and
17	\$40,230,000 for fiscal year 1999 shall be for the
18	Building Technology, State and Community Sector
19	(Non-Grants), including—
20	(A) $\$8,762,000$ for fiscal year 1998 and
21	\$8,762,000 for fiscal year 1999 for Building
22	Systems Design for Building America Program;
23	(B) \$20,550,000 for fiscal year 1998 and
24	\$20,250,000 for fiscal year 1999 for Building
25	Equipment and Materials; and

l	(C) \$11,692,000 for fiscal year 1998 and
2	\$11,218,000 for fiscal year 1999 for Manage-
3	ment and Planning;
4	(2) \$125,380,000 for fiscal year 1998 and
5	\$125,048,000 for fiscal year 1999 shall be for the
6	Industry Sector, including—
7	(A) \$55,660,000 for fiscal year 1998 and
8	\$55,660,000 for fiscal year 1999 for Industries
9	of the Future (Specific);
10	(B) \$39,120,000 for fiscal year 1998 and
11	\$39,120,000 for fiscal year 1999 for Industries
12	of the Future (Crosscutting);
13	(C) \$23,950,000 for fiscal year 1998 and
14	\$23,950,000 for fiscal year $1999$ for Tech-
15	nology Access; and
16	(D) $$6,650,000$ for fiscal year 1998 and
17	\$6,318,000 for fiscal year 1999 for Manage-
18	ment and Planning;
19	(3) \$176,876,000 for fiscal year 1998 and
20	\$176,525,000 for fiscal year $1999$ shall be for the
21	Transportation Sector, including—
22	(A) $$124,046,000$ for fiscal year 1998 and
23	\$124,046,000 for fiscal year 1999 for Advanced
24	Automotive Technologies;

1	(B) \$18,000,000 for fiscal year 1998 and
2	\$18,000,000 for fiscal year 1999 for Advanced
3	Heavy Vehicle Technologies;
4	(C) \$30,500,000 for fiscal year 1998 and
5	\$30,500,000 for fiscal year 1999 for Transpor-
6	tation Materials Technologies; and
7	(D) \$7,030,000 for fiscal year 1998 and
8	\$6,679,000 for fiscal year 1999 for Implemen-
9	tation and Program Management,
10	except that, notwithstanding subparagraphs (A)
11	through (D), the total amount which may be appro-
12	priated under this paragraph shall not exceed the
13	overall sums stated at the beginning of this para-
14	graph;
15	(4) \$20,948,000 for fiscal year 1998 and
16	\$19,900,000 for fiscal year 1999 shall be for Policy
17	and Management; and
18	(5) \$50,000,000 for fiscal year 1998 and
19	\$75,000,000 for fiscal year 1999 shall be for an En-
20	ergy Efficiency Science Initiative to be managed by
21	the Director of the Office of Energy Research, in
22	consultation with the Assistant Secretary for Energy
23	Efficiency and Renewable Energy on the goals and
24	priorities of the initiative, for grants to be competi-

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tively awarded and subject to peer review for re-

2	search relating to energy efficiency.
3	SEC. 4. FUNDING LIMITATIONS.
4	None of the funds authorized by this Act for fiscal
5	year 1998 or fiscal year 1999 may be used for the follow-
6	ing programs, projects, and activities, except to fulfill con-
7	tractual obligations:
8	(1) Nuclear Energy Advanced Light Water Re-
9	actor.
10	(2) Nuclear Energy Commercial Reactor.
11	(3) Nuclear Energy Security.
12	(4) Nuclear Energy Termination Costs Gas
13	Turbine-Modular Helium Reactor.
14	(5) Nuclear Energy Termination Costs Ad-
15	vanced Light Water Reactor.
16	(6) Fossil Energy Research and Development
17	Advanced Research and Technology Development
18	Coal Technology Export.
19	SEC. 5. NATIONAL ACADEMY OF SCIENCES REPORTS.
20	(a) High Energy and Nuclear Physics.—The
21	Secretary shall enter into appropriate arrangements with
22	National Academy of Sciences for the Academy to prepare
23	a report on the high energy and nuclear physics activities
24	of the Department, assuming a combined budget of
25	\$977,080,000 for all activities authorized under section 3

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- 1 (c) and (d) for fiscal year 1998, and \$941,000,000 for
- 2 each of the fiscal years 1999, 2000, 2001, and 2002. The
- 3 report shall include—
- 4 (1) a priority list of research opportunities, in-5 cluding both ongoing and proposed activities;
- 6 (2) an analysis of the relevance of each research
  7 facility to the research opportunities listed under
  8 paragraph (1);
  - (3) recommendations for the optimal balance among facility operations, construction, and research support and the optimal balance between university and laboratory research programs; and
- 13 (4) recommended schedules for the continu-14 ation, consolidation, or termination of each research 15 program, and continuation, upgrade, transfer, or clo-16 sure of each research facility.
- 17 Not later than December 31, 1997, the Secretary shall
- 18 transmit to the Committee on Science of the House of
- 19 Representatives and the Committee on Energy and Natu-
- 20 ral Resources of the Senate the report prepared under this
- 21 subsection.
- 22 (b) Basic Energy Sciences.—(1) The Secretary
- 23 shall enter into appropriate arrangements with the Na-
- 24 tional Academy of Sciences for the Academy to prepare
- 25 a report on the basic energy sciences activities of the De-

1	partment, based on the following three budget options for
2	the entire Basic Energy Sciences account and all related
3	research and energy asset activities:
4	(A) Provision of \$683,000,000 for each of the
5	fiscal years 1999 through 2002.
6	(B) Provision of \$683,000,000 for fiscal year
7	1999, and an amount reflecting a three percent re-
8	duction in each year thereafter through fiscal year
9	2002.
10	(C) Provision of \$683,000,000 for fiscal year
11	1999, and an amount reflecting a three percent in-
12	crease in each year thereafter through fiscal year
13	2002.
14	(2) None of the figures described in paragraph (1)(A)
15	through (C) shall be altered to reflect inflationary allow-
16	ances. The report shall include—
17	(A) a priority list of research opportunities, in-
18	cluding both ongoing and proposed activities;
9	(B) an analysis of the relevance of each re-
20	search facility to the research opportunities listed
21	under subparagraph (A);
22	(C) recommendations for the optimal balance
23	among facility operations, construction, and research
24	support and the optimal balance between university
25	and laboratory research programs; and

1	(D) recommended schedules for the continu-
2	ation, consolidation, or termination of each research
3	program, and continuation, upgrade, transfer, or clo-
4	sure of each research facility.
5	Not later than December 31, 1997, the Secretary shall
6	transmit to the Committee on Science of the House of
7	Representatives and the Committee on Energy and Natu-
8	ral Resources of the Senate the report prepared under this
9	paragraph.
10	(c) National Spallation Neutron Source.—
11	The Secretary shall enter into appropriate arrangements
12	with National Academy of Sciences for the Academy to
13	prepare a report containing a detailed evaluation of the
14	costs of construction and operation of the National Spall-
15	ation Neutron Source at alternative appropriate sites, in-
16	cluding at least the Argonne National Laboratory, the
17	Brookhaven National Laboratory, the Los Alamos Na-
18	tional Laboratory, and the Oak Ridge National Labora-
19	tory. Such report shall also include an identification of
20	other advantages and disadvantages of each site evaluated.
21	Not later than December 31, 1997, the Secretary shall
22	transmit to the Committee on Science of the House of
23	Representatives and the Committee on Energy and Natu-
24	ral Resources of the Senate the report prepared under this
25	subsection. Along with such report, the Secretary shall in-

- l clude a recommendation from the Department for the pre-
- 2 ferred site that will meet its program criteria, taking into
- 3 consideration the effect of delay on neutron science work,
- 4 existing expertise in the field of neutron science, affili-
- 5 ations with institutions of higher education in neutron
- 6 science, and State allocations or commitments to facilities.

## 7 SEC. 6. NEXT GENERATION INTERNET.

- 8 None of the funds authorized by this Act, or any
- 9 other Act enacted before the date of the enactment of this
- 10 Act, may be used for the Next Generation Internet. Not-
- 11 withstanding the previous sentence, funds may be used for
- 12 the continuation of programs and activities that were
- 13 funded and carried out during fiscal year 1997.

## 14 SEC. 7. LIMITATIONS.

- 15 (a) Prohibition of Lobbying Activities.—None
- 16 of the funds authorized by this Act shall be available for
- 17 any activity whose purpose is to influence legislation pend-
- 18 ing before the Congress, except that this subsection shall
- 19 not prevent officers or employees of the United States or
- 20 of its departments or agencies from communicating to
- 21 Members of Congress on the request of any Member or
- 22 to Congress, through the proper channels, requests for leg-
- 23 islation or appropriations which they deem necessary for
- 24 the efficient conduct of the public business.

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1	(b) Limitation on Appropriations.—No sums are
2	authorized to be appropriated to the Secretary for fisca
3	years 1998 and 1999 for the activities for which sums are
4	authorized by this Act, unless such sums are specifically
5	authorized to be appropriated by this Act.
6	(c) Eligibility for Awards.—
7	(1) In general.—The Secretary shall exclude
8	from consideration for grant agreements made by
9	the Department after fiscal year 1997 any person
10	who received funds, other than those described in
11	paragraph (2), appropriated for a fiscal year after
12	fiscal year 1997, under a grant agreement from any
13	Federal funding source for a project that was not
14	subjected to a competitive, merit-based award proc-
15	ess. Any exclusion from consideration pursuant to
16	this subsection shall be effective for a period of 5
17	years after the person receives such Federal funds.
18	(2) Exception.—Paragraph (1) shall not
19	apply to the receipt of Federal funds by a person
20	due to the membership of that person in a class

- specified by law for which assistance is awarded to members of the class according to a formula provided by law.
- 24 (3) DEFINITION.—For purposes of this sub-25 section, the term "grant agreement" means a legal

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- 1 instrument whose principal purpose is to transfer a 2 thing of value to the recipient to carry out a public 3 purpose of support or stimulation authorized by a 4 law of the United States, and does not include the 5 acquisition (by purchase, lease, or barter) of prop-6 erty or services for the direct benefit or use of the 7 United States Government. Such term does not in-8 clude a cooperative agreement (as such term is used 9 in section 6305 of title 31, United States Code) or 10 a cooperative research and development agreement 11 (as such term is defined in section 12(d)(1) of the 12 Stevenson-Wydler Technology Innovation Act of 13 1980 (15 U.S.C. 3710a(d)(1))).
- 14 SEC. 8. NOTICE.
- 15 (a) Notice of Reprogramming.—If any funds au-
- 16 thorized by this Act are subject to a reprogramming action
- 17 that requires notice to be provided to the Appropriations
- 18 Committees of the House of Representatives and the Sen-
- 19 ate, notice of such action shall concurrently be provided
- 20 to the Committees on Science and Commerce of the House
- 21 of Representatives and the Committee on Energy and
- 22 Natural Resources of the Senate.
- 23 (b) NOTICE OF REORGANIZATION.—The Secretary
- 24 shall provide notice to the Committees on Science, Com-
- 25 merce, and Appropriations of the House of Representa-

- 1 tives, and the Committees on Energy and Natural Re-
- 2 sources and Appropriations of the Senate, not later than
- 3 15 days before any major reorganization of any program,
- 4 project, or activity of the Department.
- 5 SEC. 9. SENSE OF CONGRESS ON THE YEAR 2000 PROBLEM.
- With the year 2000 fast approaching, it is the sense
- 7 of Congress that the Department should—
- 8 (1) give high priority to correcting all 2-digit
- 9 date-related problems in its computer systems to en-
- sure that those systems continue to operate effec-
- tively in the year 2000 and beyond;
- (2) assess immediately the extent of the risk to
- the operations of the Department posed by the prob-
- lems referred to in paragraph (1), and plan and
- budget for achieving Year 2000 compliance for all of
- its mission-critical systems; and
- 17 (3) develop contingency plans for those systems
- that the Department is unable to correct in time.
- 19 SEC. 10. BUY AMERICAN.
- 20 (a) COMPLIANCE WITH BUY AMERICAN ACT.—No
- 21 funds appropriated pursuant to this Act may be expended
- 22 by an entity unless the entity agrees that in expending
- 23 the assistance the entity will comply with sections 2
- 24 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a-
- 25 10c, popularly known as the "Buy American Act").

- 1 (b) SENSE OF CONGRESS.—In the case of any equip-
- 2 ment or products that may be authorized to be purchased
- 3 with financial assistance provided under this Act, it is the
- 4 sense of Congress that entities receiving such assistance
- 5 should, in expending the assistance, purchase only Amer-
- 6 ican-made equipment and products.
- 7 (c) NOTICE TO RECIPIENTS OF ASSISTANCE.—In
- 8 providing financial assistance under this Act, the Sec-
- 9 retary of Energy shall provide to each recipient of the as-
- 10 sistance a notice describing the statement made in sub-
- 11 section (a) by the Congress.